WHAT IS CLAIMED IS:

1. An apparatus for controlling a duplication structure of a Base station Transceiver Subsystem (BTS), the BTS having N number of sectors including a first sector to an Nth sector and M number of Frequency Assignments (FAs) including a first FA to an Nth FA, the apparatus comprising:

N number of power dividers, each of which has M number of output ports and one redundancy output port, each of the power dividers dividing an input signal into equal-power signals each of the equal-power signals having 1/(M+1) power and outputting the power-divided signals through the M number of output ports and one redundancy output port;

(N×M) number of receiversfordemodulating signals outputted from the output ports of the N number of power dividers, respectively;

a redundancy receiverfor demodulating a signal which has been processed by and is switched over from one of the (N×M) number of receivers according to a predetermined control;

a switch connected to each of redundancy output ports of the N number of power dividers, the switch connecting a signal outputted from one of the redundancy output ports to the redundancy receiver according to a predetermined control; and

a controllerwhich monitors operation states of the (N×M) number of receivers and controls the switch to connect a redundancy signal to the redundancy receiver when the controller detects one abnormally-operating receiver from among the (N×M) number of receivers, the redundancy signal being outputted from a redundancy output port of a power divider connected to the abnormally-operating receiver.

2. The apparatus as claimed in claim 1, further comprising a test signal generatorfor generating a test signal for testing whether the redundancy receiver is operating normally or not, the test signal generator having one port connected

to the switch.

3. The apparatus as claimed in claim 2, wherein the controller controls the switch to connect the test signal to the redundancy receiver when all of the (N×M) number of receivers are operating normally, and determines whether the redundancy receiver is operating normally or not by means of a result obtained after the redundancy receiver processes the test signal.

4. An apparatus for controlling a duplication structure of a Base station Transceiver Subsystem (BTS), the BTS having M number of Frequency Assignments (FAs) including a first FA to an Nth FA, the apparatus comprising:

a power divider having M number of output ports and one redundancy output port, the power divider dividing an input signal into equal-power signals each having 1/(M+1) power and outputting the power-divided signals through the M number of output ports and one redundancy output port;

M number of receiversfordemodulating signals outputted from the power divider, respectively;

a redundancy receiverfor demodulating a signal which has been processed by and is switched over from one of the M number of receivers according to a predetermined control;

a switch connected to the redundancy output port, the switch connecting a signal outputted from the redundancy output port to the redundancy receiver according to a predetermined control; and

a controllerwhich monitors operation states of the M number of receivers and controls the switch to connect a redundancy signal to the redundancy receiver when the controller detects one abnormally-operating receiver from among the M number of receivers, the redundancy signal being outputted from the redundancy output port.

5. An apparatus for controlling a duplication structure of a Base station

Transceiver Subsystem (BTS), the BTS having three sectors including an α sector to a γ sector and four Frequency Assignments (FAs) including a first FA to a fourth FA, the apparatus comprising:

three power dividers, each of which has four output ports and one redundancy output port, each of the power dividers dividing an input signal into equal-power signals each having 1/5 power and outputting the power-divided signals through the four output ports and one redundancy output port;

twelve receiversfor demodulating signals outputted from the output ports of the three power dividers, respectively;

a redundancy receiverfordemodulating a signal which has been processed by and is switched over from one of the twelve receivers according to a predetermined control;

a 4:1 switch connected to each of redundancy output ports of the three power dividers, the 4:1 switch connecting a signal outputted from one of the redundancy output ports to the redundancy receiver according to a predetermined control; and

a controllerwhich monitors operation states of the twelve receivers and controls the 4:1 switch to connect a redundancy signal to the redundancy receiver when the controller detects one abnormally-operating receiver from among the twelve receivers, the redundancy signal being outputted from a redundancy output port of a power divider connected to the abnormally-operating receiver.

6. The apparatus as claimed in claim 5, further comprising a test signal generatorfor generating a test signal for testing whether the redundancy receiver is operating normally or not, the test signal generator having one port connected to the 4:1 switch.

7. The apparatus as claimed in claim 6, wherein the controller controls the 4:1 switch to connect the test signal to the redundancy receiver when all of the twelve receivers are operating normally, and determines whether the

redundancy receiver is operating normally or not by means of a result obtained after the redundancy receiver processes the test signal.

8. A method for controlling a duplication structure of a Base station Transceiver Subsystem (BTS), the BTS having N number of sectors including a first sector to an Nth sector and M number of Frequency Assignments (FAs) including a first FA to an Nth FA, the method comprising the steps of:

dividing an input signal into equal-power signals via N number of power dividers, each of which has M number of output ports and one redundancy output port, and each of the equal-power signals having 1/(M+1) power;

outputting the power-divided signals through the M number of output ports and one redundancy output port;

demodulating signals output from the output ports of the N number of power dividers, respectively via (N×M) number of receivers;

demodulating a signal which has been processed by and is switched over from one of the (N×M) number of receivers according to a predetermined control via a redundancy receiver;

connecting to each of redundancy output ports of the N number of power dividers via a switch, the switch connecting a signal output from one of the redundancy output ports to the redundancy receiver according to a predetermined control; and

monitoring operation states of the (N×M) number of receivers and controlling the switch to connect a redundancy signal to the redundancy receiver when the controller detects one abnormally-operating receiver from among the (N×M) number of receivers via a controller, the redundancy signal being outputted from a redundancy output port of a power divider connected to the abnormally-operating receiver.

9. The method as claimed in claim 8, further comprising the step of:

generating a test signal for testing whether the redundancy receiver is

operating normally or not via a test signal generator, the test signal generator having one port connected to the switch.

10. The method as claimed in claim 9, further comprising the step of:

controlling the switch to connect the test signal to the redundancy receiver when all of the (N×M) number of receivers are operating normally via the controller; and

determining whether the redundancy receiver is operating normally or not by means of a result obtained after the redundancy receiver processes the test signal via the controller.

11. A method for controlling a duplication structure of a Base station Transceiver Subsystem (BTS), the BTS having M number of Frequency Assignments (FAs) including a first FA to an Nth FA, the method comprising the steps of:

dividing an input signal into equal-power signals each having 1/(M+1) power via a power divider having M number of output ports and one redundancy output port;

outputting the power-divided signals through the M number of output ports and one redundancy output port;

demodulating signals output from the power divider, respectively via M number of receivers;

demodulating a signal which has been processed by and is switched over from one of the M number of receivers according to a predetermined control via a redundancy receiver;

connecting to the redundancy output port via a switch, the switch connecting a signal output from the redundancy output port to the redundancy receiver according to a predetermined control; and

monitoring operation states of the M number of receivers and controlling the switch to connect a redundancy signal to the redundancy receiver when the

controller detects one abnormally-operating receiver from among the M number of receivers via a controller, the redundancy signal being output from the redundancy output port.

12. A method for controlling a duplication structure of a Base station Transceiver Subsystem (BTS), the BTS having three sectors including an α sector to a γ sector and four Frequency Assignments (FAs) including a first FA to a fourth FA, the method comprising the steps of:

dividing an input signal into equal-power signals each having 1/5 power via three power dividers, each of which has four output ports and one redundancy output port;

outputting the power-divided signals through the four output ports and one redundancy output port;

demodulating signals output from the output ports of the three power dividers, respectively via twelve receivers;

demodulating a signal which has been processed by and is switched over from one of the twelve receivers according to a predetermined control via a redundancy receiver;

connecting to each of redundancy output ports of the three power dividers via a 4:1 switch, the 4:1 switch connecting a signal output from one of the redundancy output ports to the redundancy receiver according to a predetermined control; and

monitoring operation states of the twelve receivers and controlling the 4:1 switch to connect a redundancy signal to the redundancy receiver when the controller detects one abnormally-operating receiver from among the twelve receivers via a controller, the redundancy signal being output from a redundancy output port of a power divider connected to the abnormally-operating receiver.

13. The method as claimed in claim 12, further comprising the step of:

generating a test signal for testing whether the redundancy receiver is

operating normally or not via a test signal generator, the test signal generator having one port connected to the 4:1 switch.

14. The method as claimed in claim 13, further comprising the step of:

controlling the 4:1 switch to connect the test signal to the redundancy receiver when all of the twelve receivers are operating normally via the controller; and

determining whether the redundancy receiver is operating normally or not by means of a result obtained after the redundancy receiver processes the test signal via the controller.